PRODUCTION OF TRANS-RESVERATROL BY GRAPEVINE CELL SUSPENSIONS

PATENTED TECHNOLOGY

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ABSTRACT

The Department of Agrochemistry and Biochemistry of the University of Alicante in cooperation with the department of Plant Biology of the University of Murcia has developed a biological process to produce high levels of pure trans-resveratrol in-vitro from grapevine cell suspensions. Resveratrol is a natural substance with beneficial effects on health due to its antioxidant and anticancer properties.

This technology could be of interest for pharmaceutical and agrofood industries since it represents great innovations compared to the current production of resveratrol.

ADVANTAGES AND INNOVATIVE ASPECTS

- A high degree of purity can be obtained with this biological process. Simple dehydration of the culture broth yields trans- resveratrol preparations of more than 90% purity.

- Raw material to produce trans- resveratrol are common and cheap. Grapevine cell suspensions can be grown on very common substrates containing sugar, salts and vitamins.

- There is no need to feed any specific precursor of resveratrol during the biological process.

MARKET APPLICATIONS

The technology could be of interest for companies belonging to the followings sectors: Biotechnology, Medicine, Health, Nutritional products, Pharmaceutical products, Fine chemicals, Food products (animal, human), Beverages.

COLLABORATION SOUGHT

The Department of Agrochemistry and Biochemistry of the University of Alicante has the know-how to produce high levels of pure transresveratrol in-vitro from grapevine cell suspensions at laboratory scale. It is seeking for:

- Partners willing to give further research or development support with the aim of establishing a research project, licence agreement or joint venture agreement. It has no preferences for any country.

- R&D departments of any company interested in carrying out feasibility studies on the industrial application of this technology.